Enclosures to letter dated 13 August 2004 concerning European Patent Appln. No. PCT/EP03/08507; -DSM IP Assets B.V.-; ref: 20347WO.

- for replacement of pages 23 and 24 -

AMENDED CLAIMS (clean version)

1. Process for the preparation of L-3,4-dihydroxyphenylalanine, wherein L-3,4,-dihydroxyphenylalanine is produced in a fermentation medium by aerobic fermentation of a recombinant microorganism having L-tyrosine-3-hydroxy-mono-oxygenase activity and having at least the abilities to convert glucose or another carbon source into phosphoenol pyruvate (PEP) and into erythrose 4-phosphate (E4P), and to convert PEP and E4P into L-phenylalanine, L-tyrosine and L-tryptophan, wherein the process comprises
   i) a growth phase and a production phase, wherein L-3,4-dihydroxy-phenylalanine is produced in the fermentation medium and
   (ii) a downstream processing phase,
   characterized in that L-3,4-dihydroxy-phenylalanine is produced from a carbon source and in that during at least part of the production phase and/or downstream processing phase the pH is in the range of from 1 to 7.
2. Process according to claim 1, characterized in that in the downstream processing phase the L-3,4-dihydroxy-phenylalanine produced is extracted from the fermentation medium and reextracted into a reextraction mixture.
3. Process according to claim 1 or 2, characterized in that the pH of the fermentation medium comprising L-3,4-dihydroxy-phenylalanine and/or the pH of the reextraction mixture comprising L-3,4-dihydroxy-phenylalanine is in the range of from 1 to 7 during the entire production phase of the fermentation and/or during the entire downstream processing phase.
4. Process according to any of claims 1-3, characterized in that L-3,4,-dihydroxyphenylalanine is recovered from the fermentation medium by adsorption resins with a hydrophobic interactive surface and by subsequent elution of the bound L-3,4,-dihydroxyphenylalanine from the resins with a reextraction mixture.
5. Process according to any of claims 1-4, characterized in that L-3,4-dihydroxyphenylalanine is extracted from the fermentation medium by *in situ* product recovery.
6. Process according to claim 5, characterized in that *in situ* product recovery comprises the steps of pumping the fermentation medium comprising L-3,4-dihydroxyphenylalanine and the cells of the microorganism over a filter to separate the cells from the fermentation medium, extracting L-3,4-dihydroxyphenylalanine from the fermentation medium by reactive extraction and transferring L-3,4-dihydroxyphenylalanine into the reextraction mixture by reextraction, and recycling of the cells and remaining fermentation medium to the fermentation.
7. Process according to any of claims 1-6, characterized in that the recombinant microorganism overexpresses a 4-hydroxyphenylacetate 3-hydroxylase.
8. Process according to any of claims 1-7, characterized in that the recombinant microorganism also overexpresses a gene encoding a $FADH_2$-NAD-oxidoreductase.
9. Process according to any of claims 1-8, characterized in that the carbon source is glucose.
10. Process according to any of claims 1-9, characterized in that the microorganism is *Escherichia coli* W3110/pACYC*tac aroF*^{FBR} *tyrA/* pJF119EH *hpaBhpaC*.